



Stanley Consultants INC

Computed by	J.M. Brady	Date	27-Jul-09	Job No.		Page No.	
Checked by		Date		Subject	S. WWTP Expansion		
Approved by		Date		Cost Estimate			
				Sheet No.		of	

Objective: Update Project Cost Estimate to Expand S. WWTP to accommodate flows and loads presently treated at N. WWTP

This cost estimate summary is based on cost estimate developed in July 2008 based in part on escalation from 2000 S. WWTP Improvements

This cost estimate is based the following:

- New Influent Pump Station duplicate to existing with screens and pumps to allow incremental expansion of influent flows up to
- Two new vortex grit units with building
- Two new primary clarifiers
- Two new secondary clarifiers incl RAS pumping
- New chlorine contact chamber
- New chemical building
- No new modifications to sludge thickening, digestion, dewatering
- Two new aeration basins in separate battery with new blower building
- Demolition of North Wastewater Treatment Facilities
- Redevelopment of N. Wastewater Treatment Plant Site

South Wastewater Plant Facilities Expansion Construction	\$39,600,000
North Wastewater Plant Demolition & Redevelopment	\$16,700,000
Total Construction	\$56,300,000
Engineering, Legal, Administrative (12%)	\$6,756,000
Estimated Project Cost	\$63,056,000
Total Probable Cost (2008 Basis)	\$63,000,000

Construction costs include 20 percent contingency

ENGR, LEGAL, ADMIN
 PERMITS
 ATTORNEY
 ARCHITECT/ENV.
 ADMIN
 6,700,000
 30,000
 30,000
 60,000
 800,000
 5,760,000

ADMIN = 70000
 PERSON
 3 PEOPLE X 3 YEARS + 25% = 787,500
 USE 800,000



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Computed by

J.M. Brady

Date

21-Jul-08

Checked by

Date

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Date

Job No.

Page No.

Subject

S. WWTP Expansion

Cost Estimate

Sheet No.

of

Objective: Develop Project Cost Estimate to Expand S. WWTP to accommodate flows and loads presently treated at N. WWTP

This cost estimate has been developed in part based on escalation from 2000 S. WWTP Improvements

This cost estimate is based the following:

New Influent Pump Station duplicate to existing with screens and pumps to allow incremental expansion of influent flows up to double present capacity
 Two new vortex grit units with building
 Two new primary clarifiers
 Two new secondary clarifiers incl RAS pumping
 New chlorine contact chamber
 New chemical building
 No new modifications to sludge thickening, digestion, dewatering
 Aeration expansion requirements require additional evaluation and depend on what effects P&G load reduction has had.
 Minimum estimated expansion is adding 5th Aeration train to the current four without any additional blower capacity changes
 More robust expansion is to provide two new aeration trains in separate battery with new blower building

Item	Number	Unit	\$/Unit	Extended
Influent Pump Station	1	LS	\$7,000,000	\$7,000,000
Two Vortex Grit Units	2	EA	\$500,000	\$1,000,000
Two Primary Clarifiers	2	LS	\$900,000	\$1,800,000
Two Secondary Clarifiers	2	LS	\$2,000,000	\$4,000,000
New Chlorine Contact Chamber	1	LS	\$600,000	\$600,000
New Chemical Building	4000	SF	\$250	\$1,000,000
Subtotal				\$15,400,000
Misc Structures				\$500,000
Misc Site Electrical				\$500,000
Misc Controls				\$1,400,000
Misc Site Piping				\$1,500,000
Misc Site				\$1,200,000
New Outfall Pipe	4000	LF	\$400	\$1,600,000
Base Subtotal				\$22,100,000
5th Aeration Basin	1	LS	\$1,600,000	\$1,600,000
5th Aeration Basin Alternative (Base Subtotal +5th Aeration Basin)				\$23,700,000
Undeveloped Details (20%)				\$4,740,000
Contingency (20%)				\$4,740,000
Subtotal				\$33,180,000
Engineering, Legal, Administrative (20%)				\$6,636,000
Estimated Project Cost				\$39,816,000
Probable Project Cost				\$40,000,000
Two Aeration Basins	1	LS	\$3,200,000	\$3,200,000
Blower Building	1	LS	\$2,000,000	\$2,000,000
Two Aeration Basins Alternative				\$27,300,000
Undeveloped Details (20%)				\$5,460,000
Contingency (20%)				\$5,460,000
Subtotal				\$38,220,000
Engineering, Legal, Administrative (20%)				\$7,644,000
Estimated Project Cost				\$45,864,000
Probable Project Cost				\$46,000,000



Stanley Consultants INC

Computed by K. Johnson Date 18-Jul-08
Checked by L.G. Jensen Date 18-Jul-08
Approved by _____ Date _____

Job No. _____ Page No. _____
Subject North Wastewater Treatment Plant
Demolition

Sheet No. _____ of _____

Item Description	Quantity		Labor & Material	
	# Units	Unit Measure	\$/Unit	Total
Building Demolition - Includes Hauling	40,400	sf	\$ 10.00	\$ 404,000
Tank Concrete Demolition	15,436	cy	\$ 250.00	\$ 3,859,000
Pavement Demolition	10,056	sy	\$ 10.00	\$ 100,560
Parking Lot Demolition	5,556	sy	\$ 5.00	\$ 27,780
Hauling Concrete/Pavement	18,038	cy	\$ 20.00	\$ 360,760
Pipe Demolition	26,000	lf	\$ 20.00	\$ 520,000
Fence Demolition	3,500	lf	\$ 3.00	\$ 10,500
Fill	82,510	cy	\$ 40.00	\$ 3,300,400
Grading	1,120,000	sf	\$ 0.15	\$ 168,000
Seeding	1,120,000	sf	\$ 0.05	\$ 56,000

	\$ 8,807,000
Undeveloped Design Details 25%	\$ 2,201,750
Contractor Overhead 15%	\$ 1,651,313
Contractor Profit 10%	\$ 1,266,006
Subtotal	\$ 13,926,069
Contingency 20%	\$ 2,785,214
Total	\$ 16,711,283
Total Cost Use	\$ 17,000,000